

## INK JET HEAD

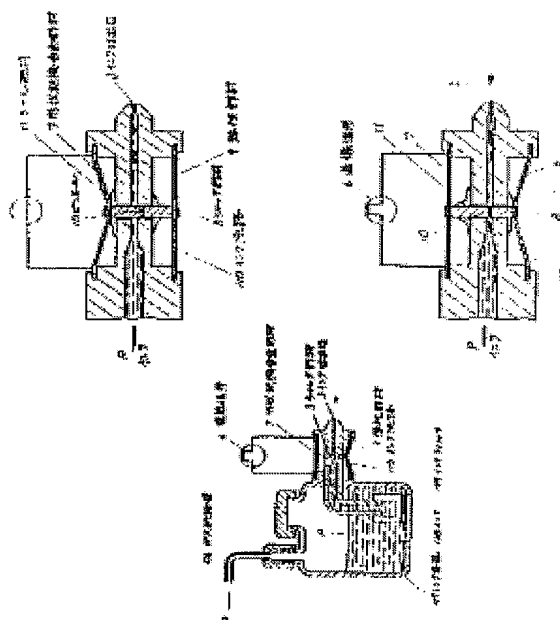
**Publication number:** JP3065348  
**Publication date:** 1991-03-20  
**Inventor:** YAMAMORI SEIJI  
**Applicant:** MATSUSHITA ELECTRIC IND CO LTD  
**Classification:**  
 - international: **B41J2/015; B41J2/015;** (IPC1-7): B41J2/015  
 - european:  
**Application number:** JP19890203323 19890804  
**Priority number(s):** JP19890203323 19890804

[Report a data error here](#)

### Abstract of **JP3065348**

**PURPOSE:** To make compact an ink jet head by providing opening/closing means provided in an ink passage for coupling an ink vessel to an ink discharge port, and means for pressurizing ink by pressure gas, and forming the opening/closing means of a shutter member having an opening, and a shape memory alloy for driving the shutter member in response to a record signal.

**CONSTITUTION:** After ink is filled in a whole ink passage to an ink discharge port 3, pressure ink is supplied to an ink passage 110 at the ink reservoir side from a shutter member 8. When image signals 6 are applied to both ends of a shape memory alloy member 7, the member 7 is heated, and when it reaches to a martensite transition point, it tends to return to its original shape, thereby pulling up the member 8. In this case, when a pinhole 10 provided at the member 8 reaches the passage 110, the pressure ink is discharged from the port 3. Then, after the signal is applied, the member 7 is cooled by the member 7, and when it is cooled to a martensite transition point or lower, the member 8 is returned by the recoiling force of an elastic member 9 to close the pinhole 10. Since, many nozzles each having simple structure are arranged in high density the structure is simplified and made compact.



Data supplied from the **esp@cenet** database - Worldwide